What is claimed is:

1. A method for providing consulting services to a customer in connection with the customer's electronics assembly system, comprising the steps of:

a. identifying a set of solutions opportunities for the customer's electronics assembly system;

b. modeling the customer's electronics assembly system in real time with the customer present;

c. defining one or more performance metrics for a proposed solution;

d. prioritizing the identified solutions by running the model for each of the identified solutions;

e. selecting a proposed solution from among the prioritized, identified solutions;

f. quantifying the benefit of the proposed solution relative to the one or more performance metrics; and

g. communicating the quantified benefit to the customer.

2. The method according to claim 1, wherein the model represents the electronics assembly system at a material flow level of abstraction.

3. The method according to claim 1, wherein the model comprises a simulation.

4. The method according to claim 1, wherein the customer's electronics assembly system is modeled within approximately one half hour.

5. The method according to claim 1, wherein the proposed solution comprises information relating to a machine in the electronics assembly system.

6. The method according to claim 1, wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment.

7. The method according to claim 5, wherein the proposed solution comprises information relating to an operating parameter of a machine in the electronics assembly system.

8. The method according to claim 1, wherein the quantified benefit comprises a cost of ownership measure.

9. The method according to claim 1, further comprising the steps of:

h. modifying the configuration of a modeled electronics assembly system proposed solution to reflect information provided by the customer;

i. quantifying the benefit of the modified proposed solution relative to the one or more performance metrics; and

j. communicating the quantified benefit of the modified proposed solution to the customer.

10. A method for developing an electronics assembly equipment sales offer to a customer during a particular sales session, the method comprising the steps of:

a. identifying a set of customer requirements and constraints;

b. selecting an electronics assembly configuration, comprising electronics assembly equipment or its operating parameters or both, for accomplishing the customer requirements;

c. establishing a model of an assembly system comprising the selected configuration;

d. running the model to generate at least one performance measure;

e. comparing the at least one performance measure against the customer constraints; and

f. if the at least one performance measure satisfies the customer constraints, offering to sell at least a subset of the electronics assembly equipment of the configuration to the customer,

wherein the offer is developed, with the benefit of the model, during the sales session.

11. The method according to claim 10, wherein the model represents the electronics assembly system at a material flow level of abstraction.

12. The method according to claim 10, wherein the model comprises a simulation.

13. The method according to claim 10, wherein the customer's electronics assembly system comprising the selected configuration is modeled within approximately one half hour.

14. The method according to claim 10, wherein the proposed configuration comprises information relating to a machine in the electronics assembly system.

15. The method according to claim 10, wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment.

16. The method according to claim 14, wherein the proposed configuration comprises information relating to an operating parameter of a machine in the electronics assembly system.

17. The method according to claim 10, wherein the performance measure relates to a cost of ownership measure.

18. A method for optimizing the performance of an electronics assembly system during a customer session, comprising the steps of:

a. establishing, during the session, a model of an assembly system having a plurality of possible configurations;

b. selecting a measure of performance for the assembly system;

c. selecting for evaluation a subset of the plurality of configurations;

d. selecting a criterion for the comparison of the subset of the plurality of configurations and selection of a preferred configuration;

e. running the model to predict the measure of performance for the system, for each of the subset of the plurality of configurations; and

f. applying the criterion to the results obtained in step e to select a preferred configuration of the assembly system.

19. The method according to claim 18, wherein the model represents the electronics assembly system at a material flow level of abstraction.

20. The method according to claim 18, wherein the model comprises a simulation.

21. The method according to claim 18, wherein the customer's electronics assembly system is modeled within approximately one half hour.

22. The method according to claim 18, wherein the proposed solution comprises information relating to a machine in the electronics assembly system.

23. The method according to claim 18, wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment.

24. The method according to claim 22, wherein the proposed solution comprises information relating to an operating parameter of a machine in the electronics assembly system.

25. The method according to claim 18, wherein the quantified benefit comprises a cost of ownership measure.